## **REMARKS**

Applicants hereby add new claims 72-75. Accordingly, claims 1-34, 36-50, 53-65, 67-68, and 71-75 are pending in the present application.

Claims 1-4, 6-9, 11-12, 14-20, 22-25, 27-28, 30, 32-34, 36, 38-41, 43-44, 46, 48-50, 54-57, 59, and 61-63 stand rejected under 35 USC 103(a) for obviousness over U.S. Patent No. 6,611,825 B1 to Billheimer et al. Claims 15, 31, 47 and 60 stand rejected under 35 USC 103(a) for obviousness over Billheimer et al. in view of U.S. Patent No. 6,289,353 to Hazelhust et al. Claims 5, 21, 37, 53, 65, 67-68, and 71 stand rejected under 35 USC 103(a) for obviousness over Billheimer et al. in view of U.S. Patent No. 6,460,036 B1 to Herz. Claims 10, 13, 26, 26, 29, 42, 45, 58, and 64 stand rejected under 35 USC 103(a) for obviousness over Billheimer et al. in view of U.S. Patent No. 5,897,627 to Leivian et al.

Applicants respectfully traverse the rejections and urge allowance of the present application.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See, e.g., MPEP §2143 (8<sup>th</sup> ed.).

With reference to the obviousness rejection of claim 1, on page 4 of the Action, it is stated that tokenizing of the query allegedly teaches the claimed inputting the plurality of query objects into a data processing device. Applicant disagrees.

In particular, col. 9 of Billheimer discloses that a query can be treated as a

document but is silent regarding disclosing how the query is provided let alone inputting

into the data processing device. Further, the tokenizing of a query fails to teach or suggest

the claimed inputting of the plurality of data objects as claimed. The tokenizing is

performed internally of the processing device and accordingly fails to disclose or suggest

the claimed inputting of the plurality of data objects into the processing device as claimed.

The query terms of Billheimer are internally generated and not inputted. At least this

one positively recited limitation is not shown nor suggested by the prior art and claim 1 is

allowable for at least this reason.

Further, claim 1 further specifies that relative relationships are determined between

inputted data (e.g., query objects) and the items of the body of data. Page 5 of the Action

states the relative relationships between each term and the documents is determined. The

relationships of the terms (which are internally computed by the processing device of

Billheimer) with the documents fails to disclose or suggest any determining of relationships

between inputted data and the items of the body of data. This additional limitation is not

shown nor suggested by the prior art and claim 1 is allowable for this additional reason.

Also, as clearly noted on page 5 of the Action, Billheimer fails to disclose or suggest

the positively claimed displaying of points. It is thereafter stated that obviously there will be

two points to represent document A. Applicants disagree and traverse the Examiner's

statement. Notably, the Action fails to recite any prior art teachings in support of the bald

allegations.

In view of the deficiencies of the present Action, Applicant respectfully requests the

issuance of a non-final Action if claim 1 is not allowed. In particular, Applicants respectfully

request identification in a non-final action of elements which allegedly correspond to

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limitations of the claims in accordance with 37 C.F.R §1.104(c)(2). In particular, 37 C.F.R §1.104(c)(2) provides that the pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified. Further, 37 C.F.R. §1.104(c)(2) states that the Examiner must cite the best references at their command. When a reference is complex or shows or describes inventions other than that claimed by Applicants, the particular teachings relied upon must be designated as nearly as practicable. The pertinence of each reference if not apparent must be clearly explained for each rejected claim specified. Applicants respectfully request clarification of the rejections with respect to specific references and specific references teachings therein pursuant to 37 C.F.R. §1.104(c)(2). The art is devoid of disclosing or suggesting plural points representing document A as baldly alleged. The CFR states that prior art teachings must be identified and Applicants request identification of the specific reference teachings relied upon with respect to both column and line numbers of the reference which allegedly teach or suggest the claimed displaying of plural points for the same specific item.

Billheimer is devoid of disclosing numerous limitations of Applicant's claims at least some of which have been identified above. The only source of the rejections may result from the personal knowledge of the Examiner. Applicants hereby request identification of prior art which discloses claimed limitations not found in the references of record or the submission of an affidavit in support of any rejection of the claims in <u>a non-final Action</u>. "[A]ssertions of technical facts in areas of esoteric technology must always be supported by citation of some reference work" and "allegations concerning specific 'knowledge' of the prior art, which might be peculiar to a particular art should also be supported." *In re Ahlert*, 424 F.2d 1088, 165 USPQ 418, 420-421 (CCPA 1970).

As outlined above, the prior art, even if modified, fails to disclose or suggest positively-recited limitations of claim 1 and accordingly the Office has failed to establish a prima facie rejection of obviousness. Claim 1 is allowable for at least this reason.

As mentioned above, motivation to modify or combine reference teachings is required to establish a prima facie case of obviousness. There is no motivation and the 103 rejection is improper for this additional reason.

The Federal Circuit discussed proper motivation *In re Lee*, 61 USPQ 2d 1430 (Fed. Cir. 2002). The motivation identified in the Office Action is akin to the conclusory statements set forth in *In re Lee* which were found to fail to provide the requisite motivation to support an obviousness rejection. The Court in *In re Lee* stated the factual inquiry whether to combine references must be through and searching. It must be based on objective evidence of record. The Court in In re Fritch, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992) stated motivation is provided only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. The Lee Court stated that the Examiner's conclusory statements in the Lee case do not adequately address the issue of motivation to combine. The Court additionally stated that the factual question of motivation is material to patentability and can not be resolved on subjective belief and unknown authority. The Court also stated that deficiencies of cited references cannot be remedied by general conclusions about what is basic knowledge or common sense. The Court further stated that the determination of patentability must be based on evidence.

In the instant case, the record is entirely devoid of any evidence to support

motivation to combine the teachings apart from the bald conclusory statements of the Examiner which are insufficient for proper motivation as set forth by the Federal Circuit. The Office cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims but must set forth objective rationale on which it relied.

More specifically, referring to page 6 of the Action, it is baldly alleged that modification is proper "in order to represent a result of two different query terms contain in the same document." Applicants submit that statements set forth in the present Office Action are akin to the alleged improper motivation discussed *In re Lee* and accordingly are insufficient to combine the reference teachings.

In particular, there is absolutely <u>no evidence of record</u> to support the <u>subjective</u> <u>conclusory statement of the Examiner</u> to modify the Billheimer teachings regarding display for a single query to displaying plural points for the same item for plural query objects. The only motivation presented in the Office Action is based upon the Examiner's <u>subjective belief or unknown authority</u> which is insufficient as clearly held by the applicable authority. As set forth by the Federal Circuit, there is no motivation and the Office Action has failed to establish a prima facie case of obviousness and accordingly the 103 rejection is improper.

In the absence of objective motivation in the Office Action, requisite motivation can only result from improper reliance upon Applicants' disclosure. However, the motivation for forming the combination must be something other than hindsight reconstruction based on using Applicant's invention as a road map for such a combination. See, e.g., Interconnect Planning Corp. v. Feil, 227 USPQ 543, 551 (Fed. Cir. 1985); In re Mills, 16 USPQ2d 1430

(Fed. Cir. 1990). The 103 rejection is improper for at least this reason. The mere fact that references *can* be combined or modified does not render the resultant combination obvious *unless the prior art also suggests the desirability of the combination*. MPEP §2143.01 *citing In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). There is no motivation present and the Office, apart from subjective opinions of the Examiner with absolutely no basis in the art or other objective evidence, has failed to identify proper motivation and the Office has failed to establish a prima facie case of obviousness.

The art is devoid of teaching or suggesting positively recited limitations of claim 1 and there is no proper motivation to modify the reference teachings. Claim 1 is allowable for at least these reasons. Also, for at least the above-mentioned reasons, Applicants respectfully request the issuance of a non-final Action if claim 1 is not allowed which corrects at least the above-identified deficiencies of the present Action so an appropriate and complete record may be provided for appeal if claim 1 is not allowed.

The claims which depend from independent claim 1 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

With reference to claim 5, on page 16 of the Action it is stated that Billheimer fails to recite limitations of claim 5 and the Office relies upon teachings of Herz to correct the deficiencies of Billheimer. The reliance is misplaced. More specifically, the Office fails to present or identify any motivation for combining the reference teachings. Pages 16-17 of the Action merely recite reference teachings with absolutely no identification of proper motivation. Page 17 of the Action sets forth subjective belief of the Examiner and fails to identify any objective evidence of record providing motivation to combine the reference

teachings as required for a proper 103 rejections. Claim 5 is allowable for at least this additional reason.

Referring to claim 17, positively-recited limitations are not shown nor suggested by the art and there is no motivation to modify or combine the prior art teachings. The Office has failed to establish a prima facie case of obviousness and claim 17 is allowable for at least this reason.

More specifically, Billheimer fails to disclose or suggest the claimed digital processing circuitry configured to determine relative relationships between each of the query objects which were input as recited in claim 17 and the items of the body of data. The terms resulting from a single query fail to disclose or suggest the inputted query objects or the claimed determination of the relative relationships between each of the query objects and the items of the body of data as claimed. Limitations of claim 17 are not shown nor suggested by the art and claim 17 is allowable for at least this reason.

As mentioned above, there is no motivation identified by Office in support of the 103 rejection of claim 17 as required to establish a proper prima facie obviousness rejection. The only motivational rationale is the subjective belief of the Examiner entirely devoid of any objective evidence or support by the prior art and which is improper for an obviousness rejection. Claim 17 is allowable for at least the above-mentioned reasons and allowance of claim 17 is respectfully requested. Applicants respectfully request the issuance of a non-final Action in compliance with the CFR to cure the above-identified deficiencies if claim 17 is not allowed so Applicants may appropriately respond.

The claims which depend from independent claim 17 are in condition for allowance for the reasons discussed above with respect to the independent claim as well as for their

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own respective features which are neither shown nor suggested by the cited art.

Referring to claim 33, it is stated that Billheimer fails to disclose displaying at least a majority of the rays to have a common origin but says it would be obvious to include a common origin in order to visualize a set of queries and the retrieved document in 3D space. Applicants submit such fails to establish proper motivation for modifying the reference teachings.

More specifically, Billheimer already positively discloses visualization of a single query and documents in a 3D space. Accordingly, Billheimer already positively discloses the alleged motivational rationale presented for the proposed modification of Billheimer and it follows that the alleged motivation identified by the Examiner is deficient.

Why would one aware of the teachings of Billheimer look to modify the reference teachings of Billheimer when such reference is already directed to the subject matter alleged to provide proper motivational rationale for modification? The answer in view of the lack of any supporting objective evidence is the motivation can only result from improper reliance upon Applicants' disclosure. The motivation for forming the combination must be something other than hindsight reconstruction based on using Applicant's invention as a road map for such a combination. See, e.g., Interconnect Planning Corp. v. Feil, 227 USPQ 543, 551 (Fed. Cir. 1985); In re Mills, 16 USPQ2d 1430 (Fed. Cir. 1990). The 103 rejection is improper for at least this reason.

The only motivational rationale is the subjective belief of the Examiner entirely devoid of any objective evidence or support by the prior art and which is improper for an obviousness rejection. Claim 33 is allowable for at least the above-mentioned reasons and allowance of claim 33 is respectfully requested. Applicants respectfully request the

issuance of a non-final Action in compliance with the CFR to cure the above-identified

deficiencies if claim 33 is not allowed so Applicants may appropriately respond.

Referring to claim 49, the prior art fails to disclose or suggest input of a plurality of

query objects into a data processing device as claimed. The internal generation of query

terms to calculate distances as taught by Billheimer fails to disclose or suggest the claimed

input. Positively-recited limitations of claim 49 are not shown nor suggested and claim 49

is allowable for at least this reason.

Also, it is alleged on pages 10-11 of the Office Action that it is obvious to modify the

teachings of Billheimer in support of the 103 rejection in order to represent a result of two

different query terms in the same document. Applicants disagree. Initially, Billheimer is

directed towards illustrating a single query and is not concerned with representing plural

queries. Apart from improper reliance upon Applicants' disclosure, there is no motivation to

modify Billheimer to display or represent plural queries and accordingly any reliance upon

the same to support further modification of Billheimer to arrive at Applicants' claimed

invention is improper. Secondly, the alleged motivation is once again the mere subjective

belief of the Examiner with absolutely no reliance upon objective evidence as required.

The Office has improperly relied upon Applicants' disclosure to modify the reference

teachings and the 103 rejection is improper without requisite motivation. Claim 49 is

allowable.

Applicants respectfully request the issuance of a non-final Action in compliance with

the CFR to cure the above-identified deficiencies if claim 49 is not allowed so Applicants

may appropriately respond.

The claims which depend from independent claim 49 are in condition for allowance

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for the reasons discussed above with respect to the independent claim as well as for their own respective features which are neither shown nor suggested by the cited art.

Referring to claim 65, the prior art fails to disclose or suggest inputting a plurality of query objects into a data processor as claimed. The internal generation of query terms to calculate distances as taught by Billheimer fails to disclose or suggest the claimed inputting. Positively-recited limitations of claim 65 are not shown nor suggested and claim 65 is allowable for at least this reason.

The 103 rejection relies upon the teachings of Herz to cure deficiencies of Billheimer. The alleged motivation to combine the reference teachings is set forth on page 19 as "to specify the distance a result document with a query, and by applying the threshold, the displaying of a query's result will be narrow down to the closest document that matches a query." The alleged motivation is deficient with respect to a proper prima facie 103 rejection.

Billheimer already discloses a particular method for returning top ranked documents and accordingly the alleged motivational rationale is redundant and fails to provide the motivation required for a proper 103 rejection. At col. 14, lines 30-35 of Billheimer it is stated that top ranked documents (in terms of closeness) are returned as best matches to the query. Accordingly, Billheimer already discloses a document selection criteria to identify matching documents. The Billheimer teachings render the alleged motivation redundant and one of skill in the art would not look to additional prior art teachings to modify Billheimer when Billheimer already discloses the teachings for which the other reference is presented. The only motivation results from improper reliance upon Applicants' disclosure the 103 rejection is improper for this additional reason.

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Amendment date 8/6/2004

Applicants respectfully request the issuance of a non-final Action in compliance with

the CFR to cure the above-identified deficiencies if claim 65 is not allowed so Applicants

may appropriately respond.

The claims which depend from independent claim 65 are in condition for allowance

for the reasons discussed above with respect to the independent claim as well as for their

own respective features which are neither shown nor suggested by the cited art.

As noted above with respect to claim 1, the obviousness rejections of claims 17, 33,

and 49 rely upon the teachings of a single prior art reference. Accordingly, the rejections

result from the personal knowledge of the Examiner. Applicants hereby request

identification of prior art which discloses claimed limitations not found in the references of

record or the submission of an affidavit in support of any rejection of the claims in a non-

final Action.

Support for the new claims may be found at least at Figs. 1, 2, 4 and 7 and the

associated specification teachings at least at pages 11-23 of the originally filed application.

Applicants submit a Supplemental Information Disclosure Statement herewith.

The Examiner is requested to phone the undersigned if the Examiner believes such

would facilitate prosecution of the present application. The undersigned is available for

telephone consultation at any time during normal business hours (Pacific Time Zone).

Respectfully submitted,

Dated: 8/6

Bv:

lames D. Shaurette

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